ORDER NO. AD9611201A2

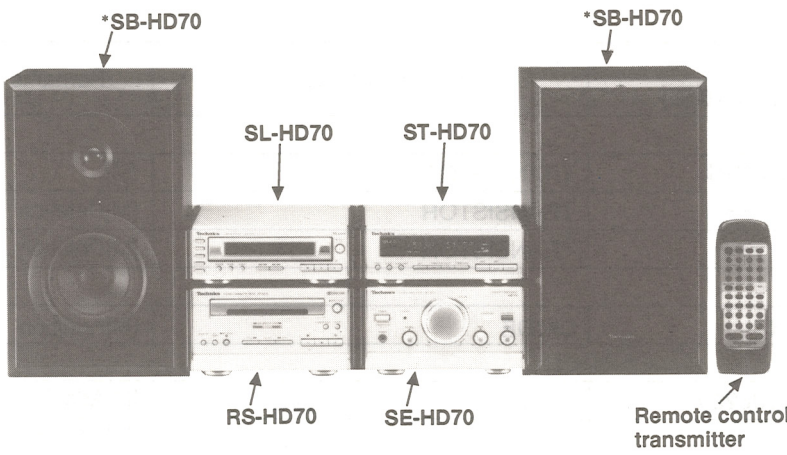
Service Manual

Cassette deck

DOLBY B NR*

Cassette deck

RS-HD70



Colour

(N) ..... Gold Type

Area

E ..... Europe.

System: SC-HD70

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Please file and use this manual together with the service manual for Model No. RS-CA01, Order No. AD9603073C2.

Notes:
- This simplified service manual is provided to indicate the main differences between the original model No. RS-CA01(E) and the subsequent model No. RS-HD70 (E).
- Refer to the packaging of this service manual.

CHANGES

■Specifications (RS-CA01 Service Manual of cover page.)

RS-CA01(E)

■General

Dimensions (W×H×D)	186x103x246 mm
Weight	1.6 kg

RS-HD70 (E)

■General

Dimensions (W×H×D)	196x103x221 mm
Weight	1.8 kg

System	Tuner	CD Changer	Amplifier	Cassette deck	Speakers
SC-HD70	ST-HD70	SL-HD70	SE-HD70	**RS-HD70**	*SB-HD70

*Made in PAES

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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■Change in Replacement Parts List (RS-CA01 Service Manual of pages 28,32,34.)

Notes: • Mentioned in this parts list is only those different from Model No. RS-CA01 (E).
All other parts are the same as for RS-CA01 (E).
• [M] indicates in Remarks columns parts that are supplied by MESA.

Ref. No.	Change of Part No. RS-CA01 (E) ➡ RS-HD70 (E)		Part Name & Description		Remarks
TRANSISTOR(S)					
Q201,202	2SJ163PQRTX	**2SJ106GBT85L**	TRANSISTOR		[M]
Q604	2SD2137PQTA	—	TRANSISTOR		[M]Deletion
Q607	2SD2137PQTA	—	TRANSISTOR		[M]Deletion
DIODE(S)					
D709	—	**MA110TX**	DIODE		[M]Addition
RESISTORS					
R241,242	—	**ERJ6GEYJ822V**	1/10W	8.2kΩ	[M]Addition
R611	ERJ6GEYJ1R0V	—	1/10W	1.0Ω	[M]Deletion
R626	ERJ6GEYJ1R0V	—	1/10W	1.0Ω	[M]Deletion
R707	—	**ERJ6GEYJ472V**	1/10W	4.7kΩ	[M]Addition
R728	ERJ6GEYJ472V	**ERJ6GEYJ103V**	1/10W	10kΩ	[M]
R741	ERJ6GEYJ123V	**ERJ6GEYJ223V**	1/10W	22kΩ	[M]
R743	ERJ6GEYJ102V	**ERJ6GEYJ473V**	1/10W	47kΩ	[M]
CABINET AND CHASSIS					
1	RHD30007-S	**RHD30073-K**	SCREW		[M]
2	RKM0326B-S	**RKM0326-S**	CABINET		[M]
4	RGK0812-S	**RGK0810-N**	SIDE ORNAMENT (L)		[M]
5	RGK0813-S	**RGK0811-N**	SIDE ORNAMENT (R)		[M]
6	RGR0240A-C	**RGR0240A-D**	REAR PANEL		[M]
9	RMK0324	**RMK0324-1**	BOTTOM CHASSIS		[M]
11	RFKGSCA01E-N	**RFKGSHD70E-N**	FRONT PANEL ASS'Y		[M]
13	RGL0331-Q2	**RGL0331-Q**	PANEL LIGHT (A)		[M]
14	RGL0332-Q1	**RGL0332-Q**	PANEL LIGHT (B)		[M]
22	—	**XTBS3+10JFZ1**	SCREW		[M] Addition
23	—	**RGK0808-M**	SIDE PANEL (L)		[M] Addition
24	—	**RGK0809-M**	SIDE PANEL (R)		[M] Addition
PACKING MATERIAL					
P1	—	**RPG3174**	PACKING CASE		[M] Addition
P2	—	**RPN1008**	CUSHION		[M] Addition
P3	—	**SPP740**	PROTECTION BAG (UNIT)		[M] Addition
P4	—	**RPQ0745**	SPACER		[M] Addition

■Schematic Diagram

● This schematic diagram may be modified at any time with development of new technology.

Page

A MAIN CIRCUIT ..... 4~7

B MECHANISM CIRCUIT 5

C OPERATION CIRCUIT 7

Notes:

- **S803**: Cassette holder open detection switch in "off" position.
- **S804**: Cassette holder close detection switch in "off" position.
- **S900**: Stop (■) switch.
- **S901**: Dolby noise-reduction switch (DOLBY NR).
- **S902**: Rewind tape program sensor switch (◀◀ [TPS]).
- **S903**: Reverse-side playback switch (◀).
- **S904**: TPS skip switch (TPS SKIP).
- **S905**: Forward-side playback switch (▶).
- **S906**: Fast forward tape program sensor switch (▶▶ [TPS]).
- **S909**: Rec pause switch (● REC PAUSE).
- **S910**: Cassette holder open/ close switch (▲ OPEN/ CLOSE).
- **S911**: Counter display switch (DISPLAY).
- **S912**: Counter reset switch (RESET).
- **S915**: Reverse-mode select switch (REV. MODE).
- **S971**: Mode switch in "off" position.
- **S972**: Half switch in "off" position.
- **S973**: ATS (CrO_2) switch in "off" position.
- **S974**: Reverse rec. inhibit switch in "off" position.
- **S975**: Forward rec. inhibit switch in "off" position.
- **S976**: ATS (Metal) switch in "off" position.

- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
  1K=1,000 (Ω), 1M=1,000 (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( )....Voltage values at record mode.
  For measurement us EVM.
- Voltage values and waveforms are measured as indicated in the schematic diagram when test points between **TP604** and **TP605**, and between **A. GND** and **TP602** are shorted.
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
- : Positive voltage line
  : Negative voltage line
  : Playback signal line
  : Recording signal line

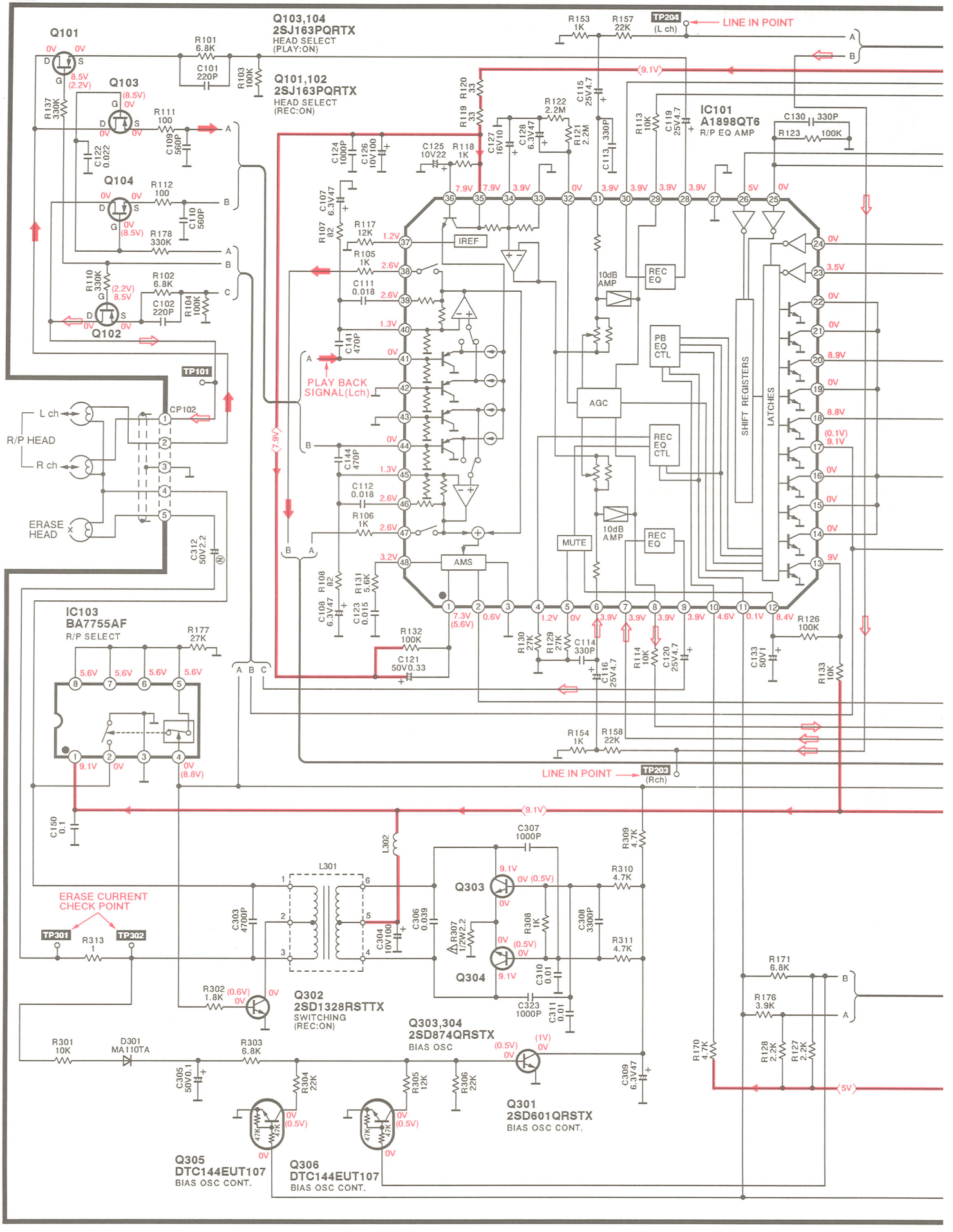
● Caution!

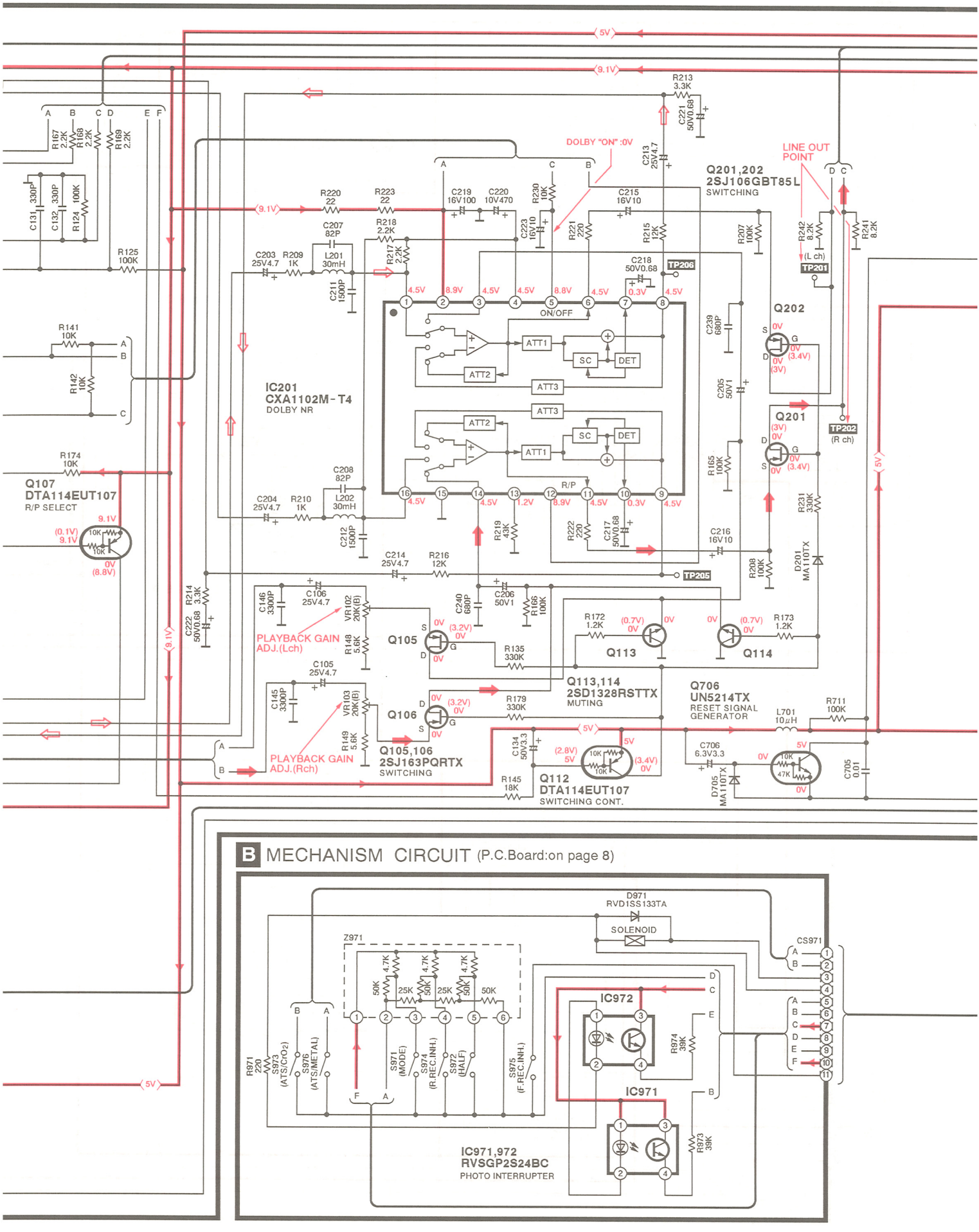
IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.

• ➡ : Playback signal line • ⇨ : Recording signal line

A MAIN CIRCUIT (P.C.Board:on page 9)

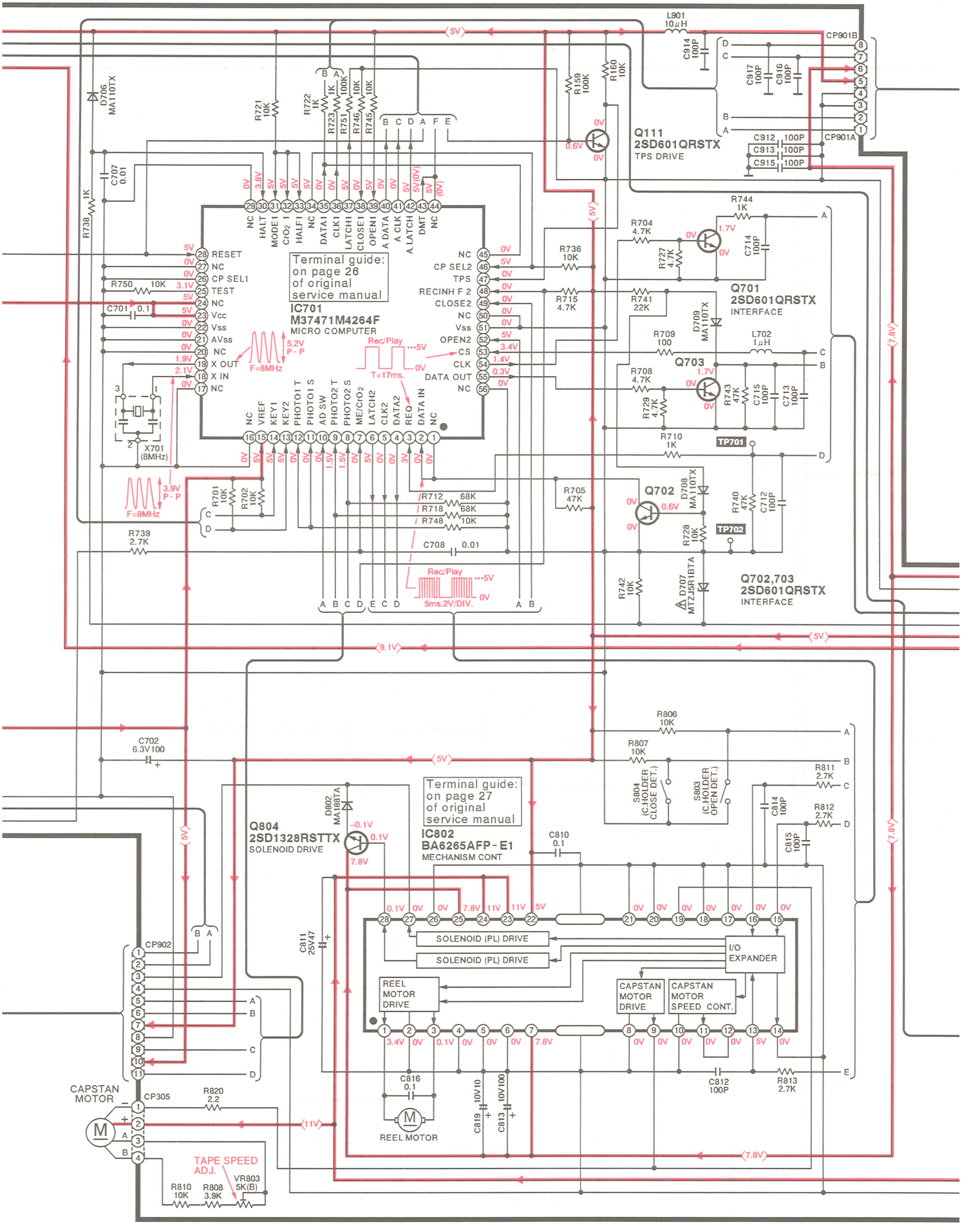




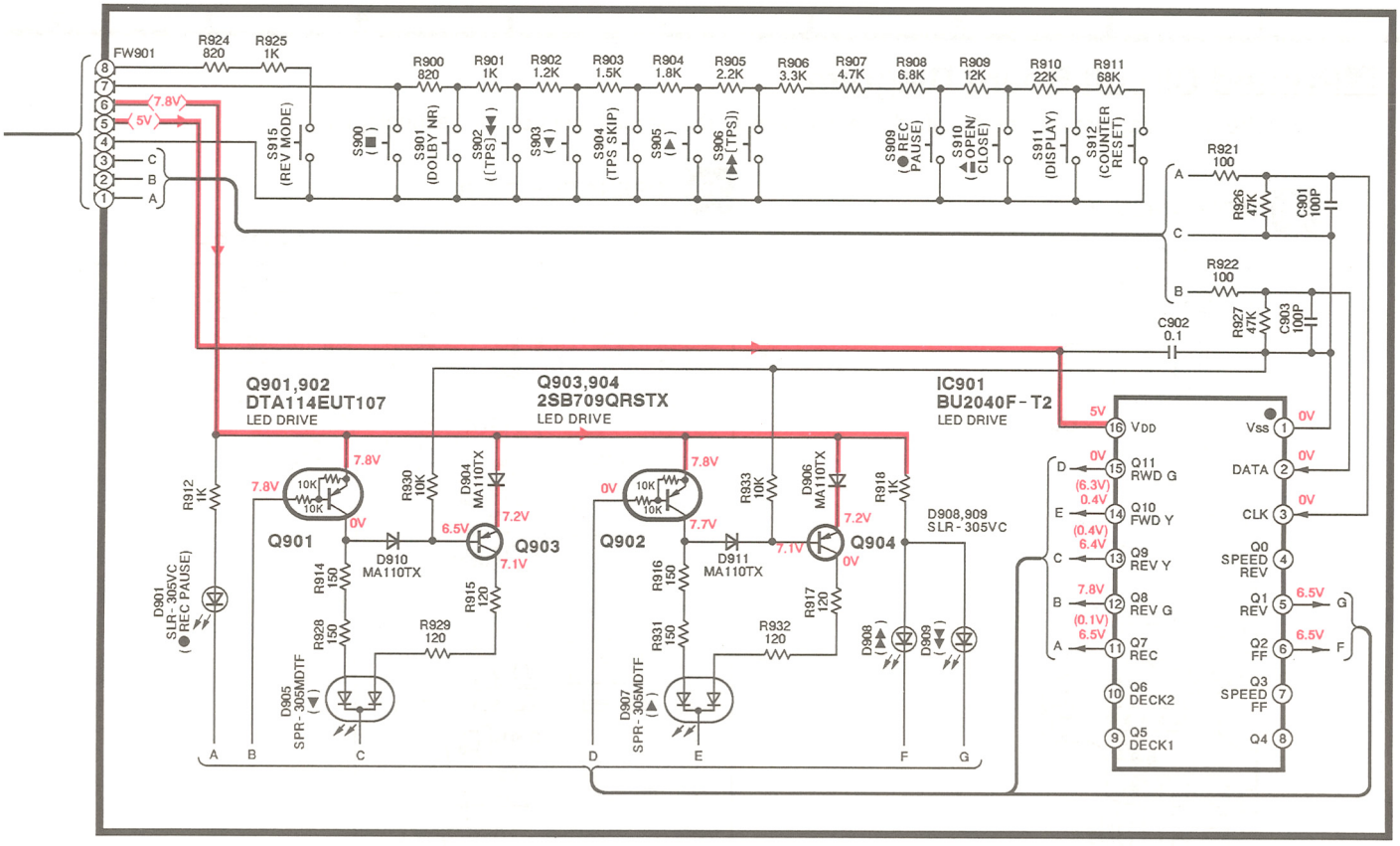
B MECHANISM CIRCUIT (P.C.Board:on page 8)

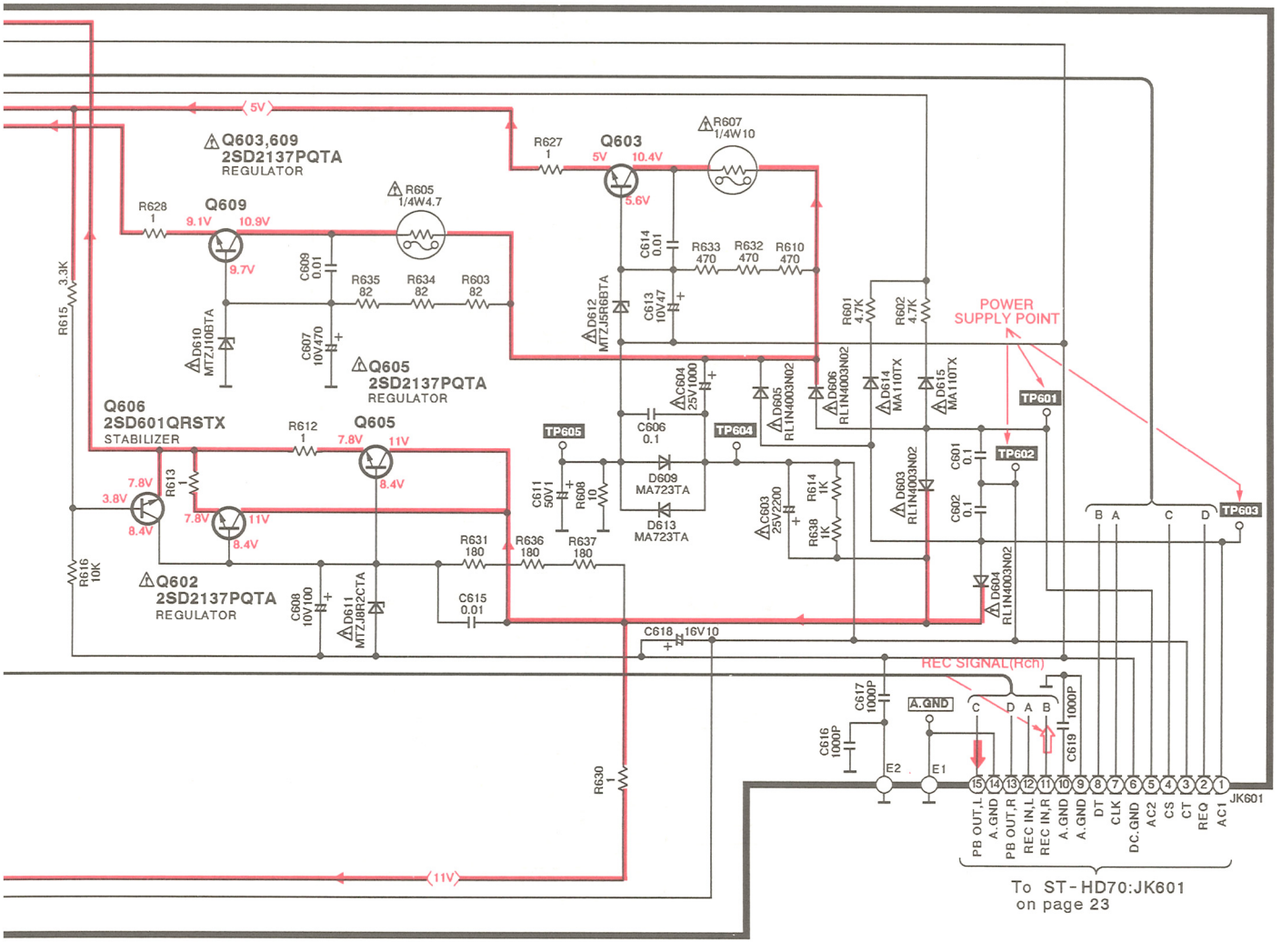
: Playback signal line : Recording signal line

A MAIN CIRCUIT (P.C.Board:on page 9)



C OPERATION CIRCUIT (P.C.Board:on page 8)

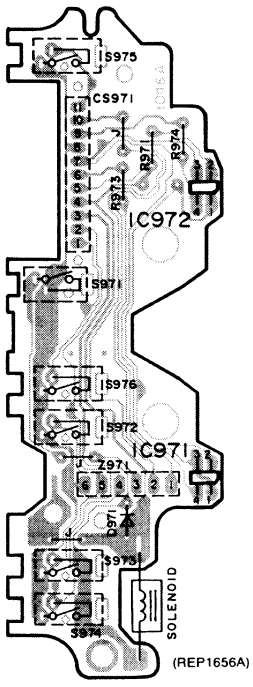




■Printed Circuit Board Diagram

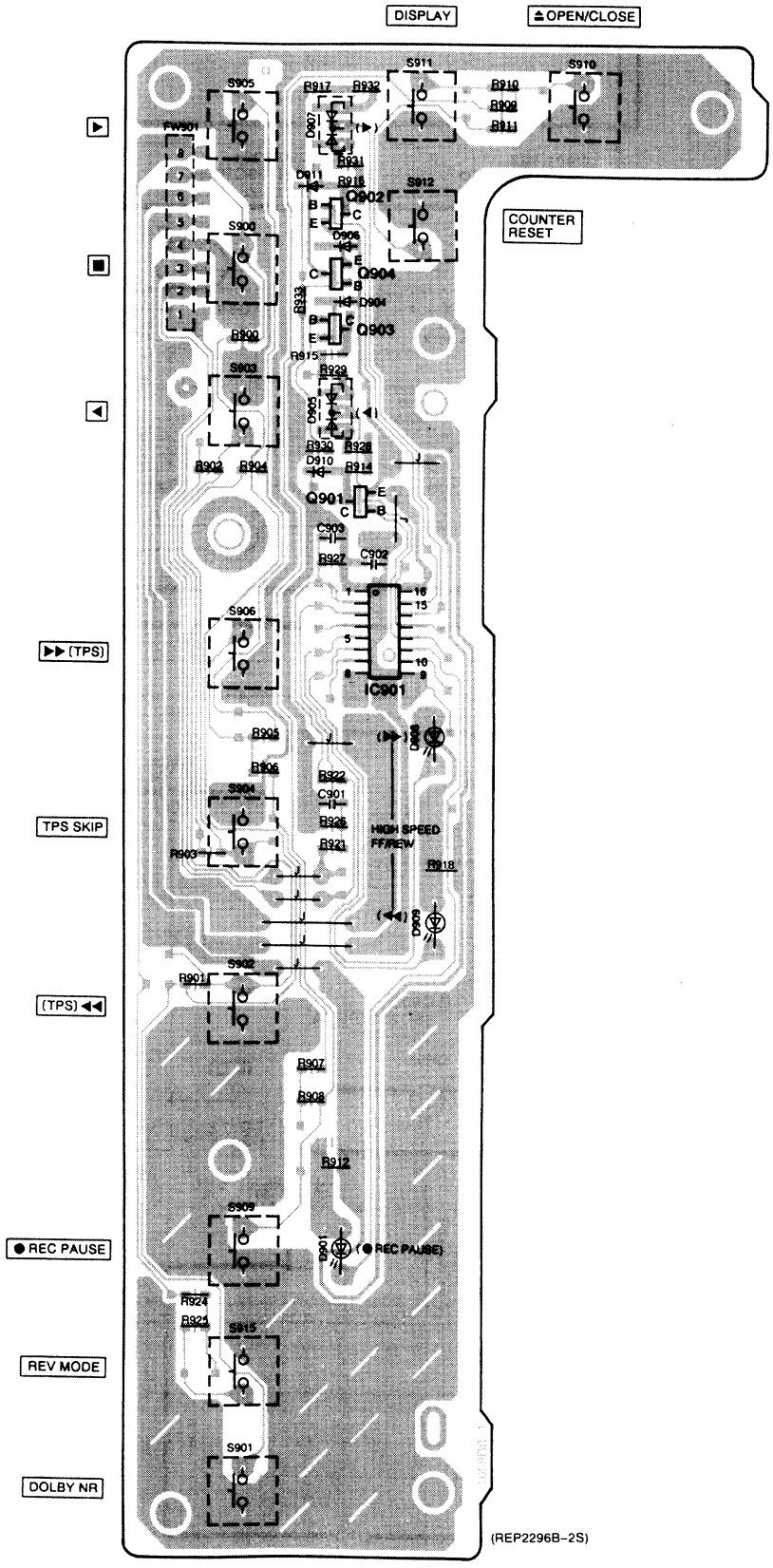
(This schematic diagram may be modified at any time with the development of new technology.)

B MECHANISM P.C.B.



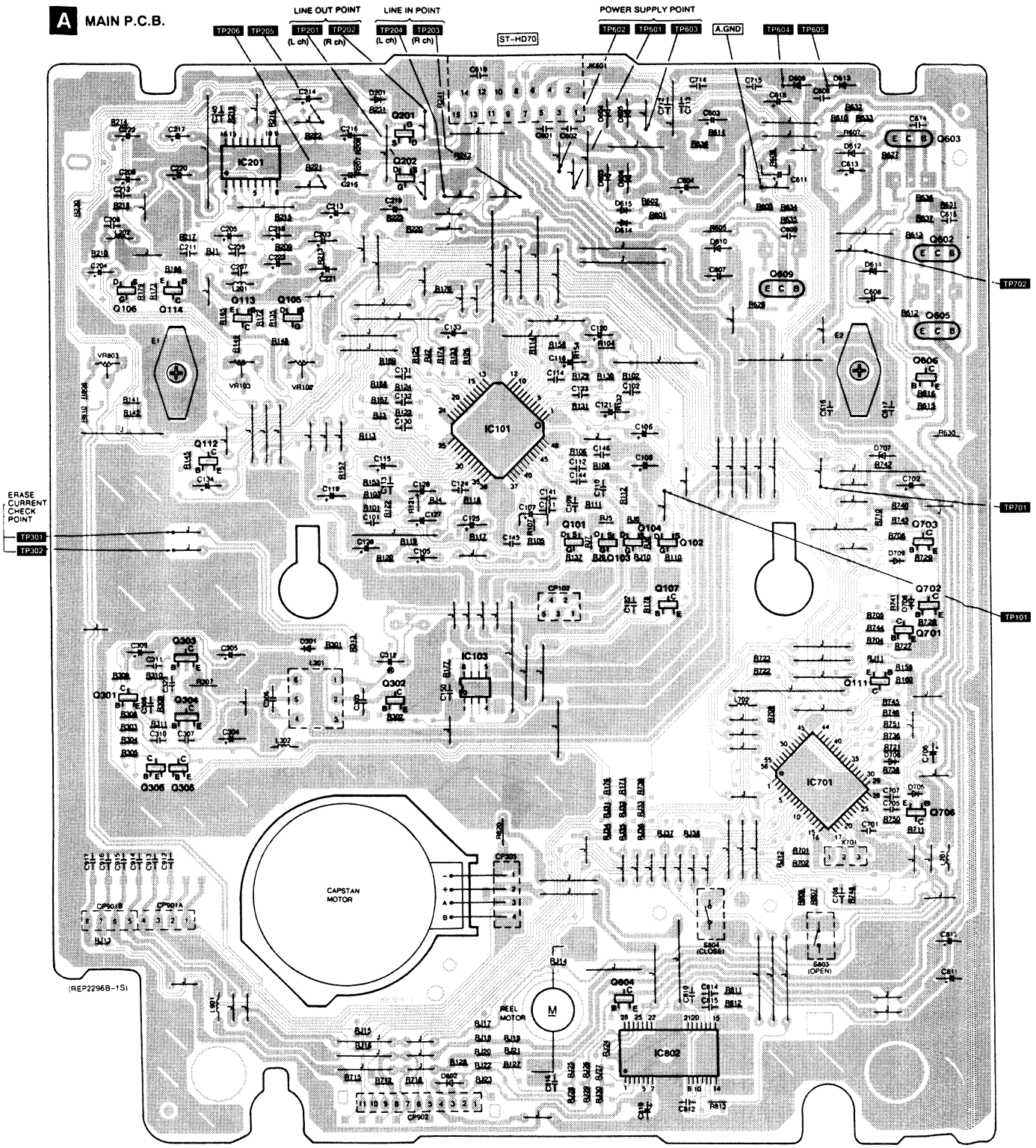
(REP1656A)

C OPERATION P.C.B.

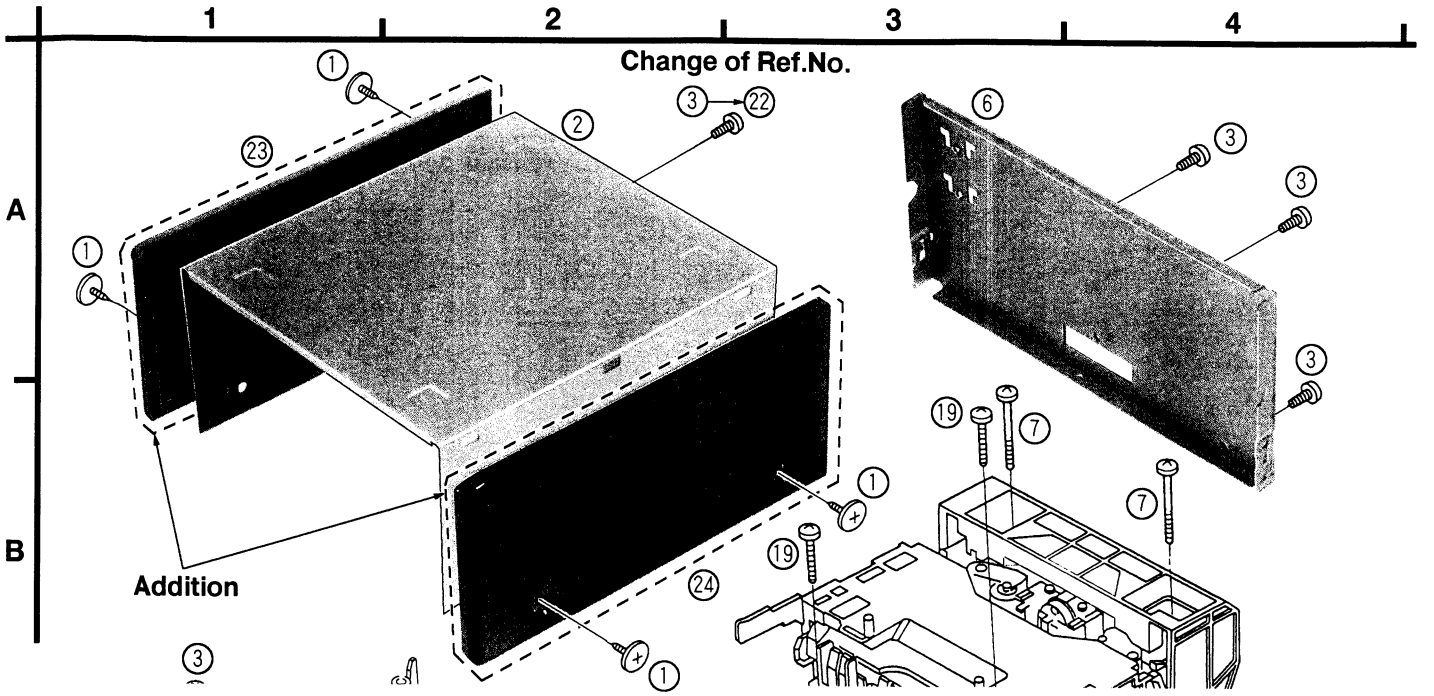


(REP2296B-2S)

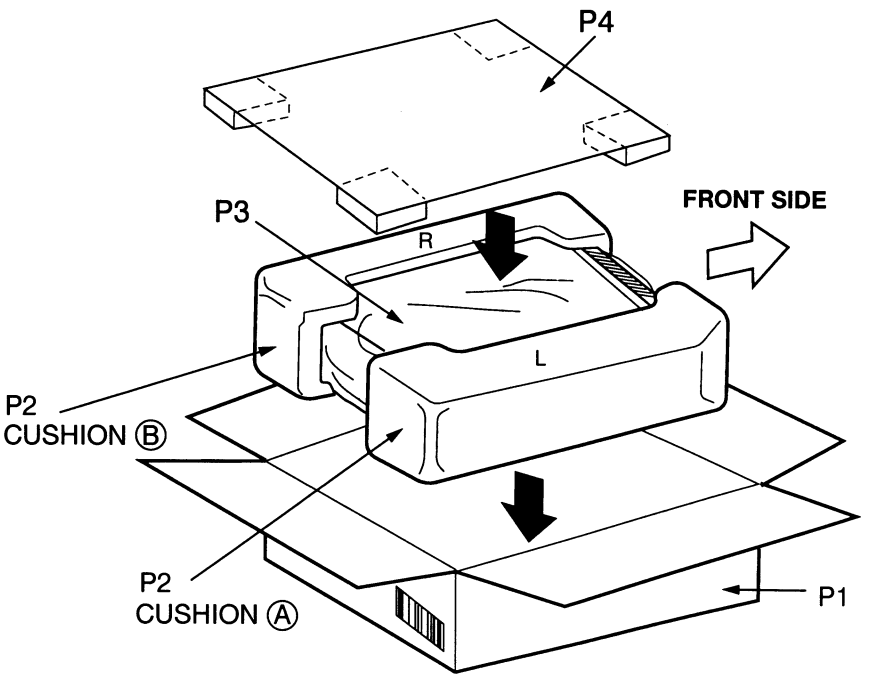
6 7 8 9 10


A MAIN P.C.B.
LINE OUT POINT
LINE IN POINT
POWER SUPPLY POINT
TP206
TP205
TP201
TP202
(L ch)
(R ch)
TP204
TP203
(L ch)
(R ch)
ST-HD70
TP602
TP601
TP603
A.GND
TP604
TP605
TP702
TP701
TP101
ERASE CURRENT CHECK POINT
TP301
TP302
IC201
IC101
IC103
IC701
IC802
Q201
Q202
Q106
Q114
Q113
Q105
Q112
Q603
Q602
Q609
Q605
Q606
Q703
Q702
Q701
Q111
Q706
Q101
Q104
Q102
Q107
Q301
Q303
Q304
Q306
Q305
Q302
Q604
VR103
VR102
VR101
CAPSTAN MOTOR
REEL MOTOR
M
(REP2296B-1S)

■Cabinet Parts Location (RS-CA01 Service Manual of pages 29.)



■Packaging



(CUSHION Ⓐ,Ⓑ : RPN1008)

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